

Home Theater FlatScreen PowerCenter™

HTFS 450

Owner's Manual

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IMPORTANT SAFETY INFORMATION

Please read and observe the following safety points at all times.

⚠ WARNING – Power Sources

Do not plug this PowerCenter™ into a power outlet that differs from the source indicated for safe use on the PowerCenter. If you don't know the type of electrical power that is supplied to your home, consult your local power company or a qualified electrician.

⚠ WARNING – Grounding and Polarization

- **A.** Do not force your PowerCenter plug into an outlet that is not designed to accept a three-wire grounded-type AC plug (a three-prong plug). This plug is designed to be inserted into a grounded-type outlet only. If this plug doesn't fit directly inside your outlet, do not attempt to force it into the outlet. Never attempt to dismantle the plug in any way (or to alter the power cord). Do not attempt to defeat the grounding feature by using a 3-to-2 prong adapter. If you have guestions about grounding, consult your local power company or a qualified electrician.
- **B.** If you use rooftop devices such as satellite dishes, antennas, or any other component with wire that connects to your PowerCenter, be sure the wire(s) is properly grounded. Use grounding techniques specified in Section 810 of the National Electrical Code (NEC), ANSI/NFPA 70 (in Canada, Part 1 of the Canadian Electrical Code). This protects against voltage surges and static charges.
- **C.** Do not place any antenna near overhead power lines or any other power circuit. Do not touch any power line or power circuit. Doing so may cause severe physical injury or possibly death.

⚠ WARNING – Liquid: Avoiding Electrical Shocks

- A. Do not operate your Monster PowerCenter if liquid of any kind is spilled onto or inside the unit.
- **B.** Do not operate your Monster PowerCenter near rain or water that's spilled or contained (e.g., bathtub, kitchen or sink).



⚠ WARNING – Power Cord Safety

- **A.** When routing your PowerCenter's AC power cord, do not place it near heavy foot traffic areas (e.g., hallways, doorways, and floors). Do not create a trip hazard with the power cord.
- **B.** If your power cord's protective jacket begins to rip or fray, exposing the internal wiring, shielding, etc., disconnect it from the power source and discontinue use of the Monster PowerCenter immediately. See the Warranty Information section of this owner's manual for important details.

⚠ WARNING – Storm Precautions

In the event of a lightning storm, it's always a good idea to disconnect your Monster PowerCenter; there is no need to disconnect your separate components. Make sure that ALL of your components and PC products are protected with Monster Power.

⚠ WARNING – No User Serviceable Parts Inside

If, for any reason, your PowerCenter is not operating properly, do not remove any part of the unit (cover, etc.) for repair. Unplug the unit and consult the Warranty Information section of this owner's manual for important details.

⚠ CAUTION – Exposure To Heat

Do not expose your PowerCenter to direct sunlight or place it near wall heaters, space heaters, or any enclosed space prone to temperature increase.

⚠ CAUTION – Proper Cleaning

In general, the only cleaning necessary for your Monster PowerCenter is a light dusting. Unplug your component from the wall before cleaning it. Do not use any type of liquid or aerosol cleaners.

PROPER GROUNDING AND INSTALLATION

⚠ WARNING – Proper Grounding

Monster PowerCenters require a properly grounded 3-wire outlet for safety and to protect connected equipment. If you're not sure if your home's electrical wiring is properly grounded, have it checked by a qualified electrician.

Many older buildings are inadequately wired. It's very common for a building to be improperly grounded. Building wiring and grounding must conform to applicable NEC (USA) or CEC (Canada) codes for the Limited Connected Equipment Warranty to be valid. If you're not sure about your home's wiring, have it checked by a qualified electrician.

IMPORTANT NOTE – Proper Power and Protection

To completely protect your equipment against electrical surges, every AC power cable, coaxial cable and phone line in the system must be connected to an appropriate PowerCenter.

IMPORTANT NOTE – Proper Protection and the Limited Connected Equipment Warranty

The Limited Connected Equipment Warranty becomes invalid if any wire (AC, coax, or phone), audio or video interconnect leading into the equipment comes from a component that is not properly protected by the PowerCenter. See the Warranty Information section of this owner's manual for important details.

A NOTE FROM THE HEAD MONSTER

Dear Enthusiast,

THANK YOU for purchasing the Monster Power® Home Theater PowerCenter HTFS 450 for flat screen HDTVs. This PowerCenter reflects our commitment to creating performance-enhancing solutions for home theater systems, so you can enjoy superior sound and picture quality.

As a long-time audiophile and serious home theater enthusiast, I always knew problematic AC power could degrade picture and sound quality. Unfortunately, ordinary AC power accessories can compromise the performance of the components they power. So, I decided to address the issue. With the help of Richard Marsh and other power experts, Monster Power was born. This PowerCenter's advanced technology and innovative design provides several unique performance and convenience features. Here are the highlights...

The Monster HTFS 450 does an excellent job of protecting your components from harmful power surges, but it's benefits include much more than just surge protection.

The patented Monster HD Clean Power™ filter is specially designed to address the noise interference generated by digital HD components and other electronic appliances.

Patented Monster HD Clean Power rejects radio frequency and electromagnetic interference.

As a result, you'll get the best performance from your AV components with more natural sound and the most vivid HD video possible. (continued on next page)



Noel Lee

Other Monster Power breakthroughs include patented Tri-Mode protection, featuring an audible alarm. This feature automatically disconnects power from your electronics if you're hit by a big surge. Best of all, the HTFS is designed to easily fit behind your flat screen, plasma, or LCD TV so you can enjoy the benefits of advanced surge protection and HD Clean Power Noise Filtering while maintaining a clean, neat flat screen TV installation.

These days, home theater components are better than ever, providing thrilling and dramatic sound and razor sharp picture. We know your new PowerCenter will help bring it all together with Clean Power and superior system protection. With Monster Power, you'll enjoy the best possible sound and picture. And, that's what home theater is all about.

Noel Lee,

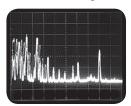
The Head Monster

PATENTED MONSTER CLEAN POWER™ STAGES

Monster Clean Power performs two tasks that are vital to maintaining optimum home theater performance:

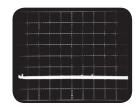
1) noise filtration and 2) noise isolation. The higher the Clean Power stage number (1–5), the more sophisticated and advanced the filters are that reject noise generated on the AC powerline. In addition, the higher the Clean Power stage number, the more isolation that exists between connected equipment for maximum rejection of component-generated noise.

Monster PowerCenters featuring Clean Power circuitry are each designated with a Clean Power Stage. The HTFS 450 incorporates Monster **HD Clean Power Stage 1** circuitry which filters both AC powerline noise and reduces noise generated by your connected equipment. **HD Clean Power Stage 1** features a single ultra-advanced filter that has been specifically engineered to meet the demands of today's digital AV electronics. This makes the HTFS 450 ideal for high definition home theater systems. To learn more about patented Monster Clean Power and the complete product family of PowerCenters, voltage stabilizers and amplifiers, please visit **MonsterPower.com**.



Actual spectrum analyzer photo of AC power pollution caused by a CD player, which is typical of many AV components





AC power line with power noise pollution filtered out by Monster Clean Power™

MONSTER EXCLUSIVE TRI-MODE TECHNOLOGY

Patented Tri-Mode technology protects all three power lines (Line, Neutral, Ground) via relays, MOVs, and thermal fuses. During voltage sags and swells, the relays automatically disconnect the Line and Neutral power lines. An audible alarm also sounds to let you know your PowerCenter has protected your components. Tri-Mode circuitry automatically reconnects your AV system to the AC power when voltage returns to normal operating threshold.



THE MINDS BEHIND THE MONSTER POWERCENTER DESIGN



Richard Marsh — Richard developed Monster's patented Clean Power™ circuitry, and is also responsible for several other groundbreaking designs including the high-end audio balanced circuit design, the MultiCap internal bypass capacitor, and the Servo-DC feedback concept in power amplifiers — a concept that is used by virtually every amplifier manufacturer today.



Demian Martin – Demian helped create several innovative AC power solutions. He was the cofounder of Spectral Audio and was the chief designer of their many pioneering designs for amplifiers, D/A converters, and other high-end audio designs. He now brings his expertise to Monster Power's elite research and development team.

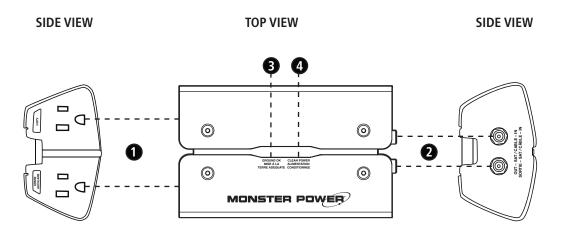


Noel Lee — Noel Lee, The Head Monster, is best known for popularizing the concept of high performance audio cable 25 years ago with his creation of Monster Cable. Originally a laser-fusion design engineer at Lawrence Livermore National Laboratory and later a touring musician, Noel has invented or co-invented over 250 U.S. and international patents. Monster Power is Noel's realization of a long-nurtured vision of making affordable power solutions that deliver the best possible sound and picture.



Tony DiChiro — was one of the founders of Kinergetics Research in 1971. Kinergetics™ developed numerous patented technologies that advanced the state of the art in audio technology, and released highly acclaimed home theater products. Kinergetics also debuted the first high-end surround sound processor with THX certification. Tony currently heads up the R&D team at Monster Cable where he continues to develop advanced products with cutting edge features.

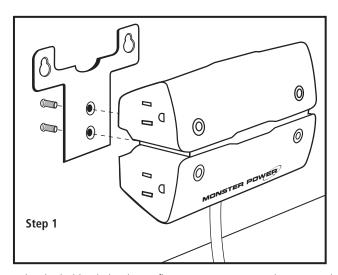
MONSTER HTFS 450 POWERCENTER FEATURES



MONSTER HTFS 450 POWERCENTER FEATURES

- **1. AC Outlets:** These outlets have special filter circuitry specially designed to eliminate noise from the AC power line to high definition components. They also provide surge protection.
- **2. Cable, Satellite and Antenna Surge Suppression:** Protects against surges travelling over coax connections. The In connects coax cable from antenna, cable or satellite. The Out connects the coax cable to your TV, cable box or satellite receiver.
- 3. "Ground OK" Indicator: Indicates the PowerCenter is plugged into a properly grounded 120V AC outlet.
- **4.** "Clean Power On" Indicator: Indicates Monster Clean Power circuitry is functioning properly.

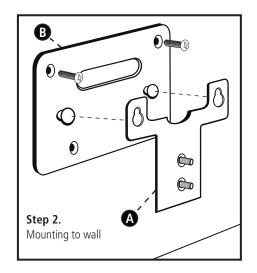
HTFS 450 Mounting Instructions

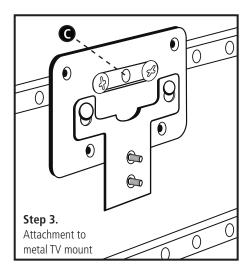


The HTFS 450 is designed to be hidden behind your flat screen HDTV. It can be mounted directly to the wall, or to one of the metal arms of your TV's mount. The HTFS 450 comes with a mounting plate, bracket, and two small bolts. You will need a small Phillips head screwdriver. Additional mounting hardware is not included. If you want to install the PowerCenter on your TV's mount, you will need one or two additional bolts with nuts sized properly to fit the HTFS 450. You may need a wrench to tighten the hardware.

For wall mounting, select two properly sized drywall or wood screws. You may also need a drill to tap holes for wall mounting.

HTFS 450 Mounting Instructions





- **Step 1.** Attach the bracket (labeled A in the diagram) to the PowerCenter with the two small bolts included with your PowerCenter.
- **Step 2.** To fasten the mounting plate (labeled B in the diagram) to a wall, use self-tapping drywall screws in the four holes. For installation on wood walls, mark the holes on the wall with a pencil and drill tap holes before inserting screws.
- **Step 3.** To attach the HTFS 450 to a metal flat screen TV mount, use two properly sized nuts and bolts inserted through the wide slot on the mounting plate (labeled C in the diagram).

TROUBLESHOOTING

Symptom	Possible Cause	Remedy
The PowerCenter is not receiving power.	The PowerCenter is not turned on.	Make sure the PowerCenter's AC power plug is plugged into a properly grounded 120 volts (nominal) wall outlet.
		A wall switch may need to be turned on. Try turning on the light switches located near the wall unit powering the PowerCenter.
Speakers emit a humming or buzzing noise.	The PowerCenter is sharing AC power with equipment that is not properly grounded.	Connect your PowerCenter to a dedicated outlet.
		Try unplugging different components from the PowerCenter one at a time to see if the noise stops. If a component is discovered to be improperly grounded, attach a copper wire from the component's chassis to the PowerCenter's grounding post.

TECHNICAL SPECIFICATIONS

HTFS 450 POWERCENTER™

Continuous Duty Electrical Rating	120V/60Hz		
Maximum Current Rating	15A/1800W		
Protection Modes	Line-Neutral (L-N) Line-Ground (L-G) Neutral-Ground (N-G)		
Total Energy Dissipation	4320 Joules		
Clamping Level (TVSS Voltage)	330 Volts		
Clamping Response Time	Less than 1 Nanosecond (<1Ns)		
Dimensions	Width:	3.58 inches	91mm
	Height:	2.06 inches	52.3mm
	Length:	5.90 inches	150mm

LIMITED WARRANTY FOR CONSUMERS

Monster, LLC, 7251 West Lake Mead Blvd, Las Vegas, NV, USA ("Monster") extends to You this Limited Warranty. Statutory or common law may provide You with additional rights or remedies, which shall not be affected by this Limited Warranty.

DEFINITIONS

"Adequate Use" means use of the Product and Connected Equipment (i) within a home or dwelling, (ii) for private (as opposed to commercial) purposes, (iii) in conformance with all applicable local, state or federal law, code or regulations (including without limitation building and/or electrical codes), (iv) in accordance with manufacturer recommendations and/or instructions in the materials and documentation that accompany the Product and any Connected Equipment, (v) with proper electrical grounding, (vi) with proper and direct connection between the Product and an AC power source that has protective grounding (excluding gas or diesel powered generators), (vii) with cable or telephone lines to any Connected Equipment properly connected to the Product, and (viii) without a connection in a "daisy-chain" fashion to or with any extension cord, surge suppressor, power strip, uninterruptible power supply ("UPS") or other equipment.

"Authorized Dealer" means any distributor, reseller or retailer that (i) was duly authorized to do business in the jurisdiction where it sold the Product to You, (ii) was permitted to sell You the Product under the laws of the jurisdiction where You bought the Product, and (iii) sold You the Product new and in its original packaging.

"Connected Equipment" means any device that is (i) generally suited to be used with the Product or products of the same kind, (ii) meets the requirements of all applicable laws and safety standards, (iii) contains only parts manufactured, sold or recommended by the original manufacturer of the Connected Equipment, and (iv) has not been altered, tampered with or modified by any person other than its manufacturer or service personnel authorized or recommended by the manufacturer of the Connected Equipment.

"Connected Equipment Damage" means physical damage caused to Connected Equipment due to a Product Defect (i) by a transient AC power, cable, telephone, or lightning surge while connected to a properly installed Product, (ii) not by a defect or unrelated damaging of the Connected Equipment or a surge/spike or lightning strike through a source, medium or connection other than through the Product, and (iii) does not extend to loss of data or consequential, indirect or special damages resulting from the Connected Equipment Damage.

"Fair Market Value" ("FMV") means the fair market value of the Connected Equipment at the time Connected Equipment Damage occurs.

"Formal Warranty Claim" means a claim made in accordance with the section "Formal Warranty Claims" herein.

"Maximum Coverage Amount" means the maximum amount that Monster will pay to You under this Limited Warranty for Connected Equipment Damages and is defined in relation to each Product in the Specifications Table below.

"Product" means a Product (i) that is listed in the Specifications Table below, (ii) that You bought from an Authorized Dealer new and in its original packaging, and (iii) whose serial number, if any, has not been removed, altered, or defaced.

"Product Defect" means a defect, malfunction, non-conformance to this Limited Warranty or other inadequacy of the Product that existed at the time when You received the Product from an Authorized Dealer and that causes a failure of the Product to perform in accordance with Monster's documentation accompanying the Product, unless such failure has been caused completely or partly by (a) any use other than Adequate Use, (b) transportation, neglect, misuse or abuse by anyone other than Monster's employees; (c) alteration, tampering or modification of the product by anyone other than a Monster employee; (d) accident (other than a malfunction that would otherwise qualify as a Product Defect); (e) maintenance or service of the Product by anyone other than a Monster employee; (f) exposure of the Product to heat, bright light, sun, liquids, sand or other contaminants; or (g) acts outside the control of Monster, including without limitation acts of God, fire, storms (excluding lightning surges), earthquake or flood.

"Warranty Period" means the time period during which Monster must have received Your Formal Warranty Claim. The different Warranty Periods related to Product Defects and Connected Equipment Damage are defined in the Specifications Table below. The Warranty Period commences on the date when You purchased or received (whichever occurs later) the Product from an Authorized Dealer as evidenced by the Authorized Dealer's invoice, sales receipt or packing slip. If You do not have written proof of the date of purchase or receipt, then the Warranty Period commences three (3) months after the date when the Product left Monster's factory as evidenced by Monster's records. The Warranty Period ends after the time defined in the Specifications Table has expired, or after You have transferred ownership of the Product, whichever occurs earlier. Also, You must call Monster and obtain a Return Authorization Number (as described under "How to Make a Claim") within two (2) months after You discover a Product Defect (or should have discovered it, if such Product Defect was obvious).

"You" means the first individual person that purchased the Product in its original packaging from an Authorized Dealer. This Limited Warranty does not apply to persons or entities that bought the Product (i) in used or unpackaged form, (ii) for resale, lease or other commercial use, or (iii) from someone other than an Authorized Dealer.

SCOPE OF THIS LIMITED WARRANTY

PRODUCTS. If a Product contained a Product Defect when You bought it from an Authorized Dealer and Monster receives a Formal Warranty Claim from You within two (2) months after You discover such Product Defect (or should have discovered it, if such Product Defect was obvious) and before the end of the Warranty Period for Product Defects applicable to the affected Product, then Monster will provide You with one of the following remedies: Monster will (1) repair or, at Monster's sole discretion, replace the Product, or (2) refund to You the purchase price You paid to the Authorized Dealer for the affected Product if repair or replacement is not commercially practicable or cannot be timely made.

CONNECTED EQUIPMENT DAMAGE. Monster will also provide You with a remedy regarding Connected Equipment Damage if (i) You have a claim under the Limited Warranty for Products because of a Product Defect that causes Connected Equipment Damage despite Adequate Use, and (ii) Monster receives a Formal Warranty Claim from You before the end of the Warranty Period for Connected Equipment Damage applicable to the affected Product. If the

conditions listed in the preceding sentence are met, Monster will provide You with one of the following remedies provided that Monster may decide at its sole discretion which of the three remedies it provides: Monster will (1) replace the damaged Connected Equipment; (2) pay to repair the damaged Connected Equipment; or (3) pay You the FMV of the Connected Equipment, provided that such payments shall not exceed (i) the Maximum Coverage Amount for the Product, or (ii) the actual damage having arisen from power surges due to a Product Defect. NOTE: COMPENSATION FOR RESTORATION OF DATA LOSS IS NOT COVERED AND MONSTER DOES NOT ASSUME ANY LIABILITY FOR ANY INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES UNDER THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL PROVISIONS

CHOICE OF LAW/JURISDICTION. The laws of the State of California, USA, govern this warranty. It gives you specific legal rights, and you may also have other rights that vary from state to state. This warranty does not affect any additional rights you have under laws in your jurisdiction governing the sale of consumer goods, including, without limitation, national laws implementing EC Directive 44/99/EC.

OTHER RIGHTS. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE. THIS WARRANTY EXTENDS ONLY TO YOU AND CANNOT BE TRANSFERRED OR ASSIGNED. If any provision of this Limited Warranty is unlawful, void or unenforceable, that provision shall be deemed severable and shall not affect any remaining provisions. In case of any inconsistency between the English and other versions of this Limited Warranty, the English version shall prevail.

REGISTRATION. Please register Your Product at **MonsterPower.com**. Failure to register will not diminish Your warranty rights.

SPECIFICATIONS TABLE

Product	Warranty Period	Maximum	Warranty Period for Connected
Model No.	for Products	Coverage Amount	Equipment Damage
HTFS 450	5 Years	US\$250,000	5 Years

FORMAL WARRANTY CLAIM

HOW TO MAKE A CLAIM. In the event damage has occurred to Products or Connected Equipment, You must follow these instructions: (1) Call Monster within two (2) months after You discover a Product Defect (or should have discovered it, if such Product Defect was obvious); (2) Give a detailed explanation of how the damage occurred; (3) Obtain a Return Authorization Number; (4) Upon receipt of a claim form (which may be sent to You after You filed Your Formal Warranty Claim), fill out the claim form entirely; (5) Return the Products, shipping prepaid by You (to be refunded if You are entitled to a remedy under the Scope of this Limited Warranty), to Monster for verification of damage, along with a copy of Your original sales receipts and proof of purchase (UPC label or packing slip) for such Products, the completed claim form, and printed Return Authorization Number on the outside of the return package (the claim form will include instructions for return).

TELEPHONE NUMBERS. United States: 1 877 800-8989 or 415-840-2000, Canada 1-866-348-4171, Czech Republic 800-14247, UK 0800 0569520, Germany 0800 1819388, France 0800 918201, Netherlands 0800 0228919, Belgium 0800 79201, Norway 800 10906, Denmark 8088 2128, Sweden 020 792650, Finland 800 112768, Greece 00800 35312008, Russia 810 80020051353, Italy 800 871479, Spain 900 982909.

FURTHER PROCEEDINGS. Monster will determine whether a Product Defect existed and the damage to the Connected Equipment was caused by the Product. You must allow Monster access to the premises and site where the damage occurred and all equipment and property related thereto for Monster inspection by its employees or authorized representatives. Monster may, at its discretion, direct You to obtain a repair estimate at a service center or, to send the Connected Equipment to Monster for repair. If a repair estimate is required, You will be instructed on how to properly submit the estimate and the resulting invoice to Monster for payment. Any fees for repairs may be negotiated by Monster.

TIMING. If You bring a Formal Warranty Claim and fully comply with all terms and conditions of this Limited Warranty, Monster will use its best efforts to provide You with a remedy within thirty (30) days after receipt of Your Formal Warranty Claim (if You reside in the United States - forty-five (45) days if You reside elsewhere), unless obstacles outside Monster's control delay the process.



We invite you to visit the Monsters at: MonsterPower.com

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Designed in the USA and manufactured for Monster to its quality specifications.

Made in China.

"Monster," "Monster Cable," "Monster Power," the Monster Power logo,
"T2," "Tri-Mode," "Monster Clean Power," "PowerCenter,"
and the PowerCenter design and packaging are trademarks or registered
trademarks of Monster Cable Products, Inc. and its subsidiaries
in the US and other countries.

The Monster Power Home Theater Reference PowerCenter HTFS 450 is protected under the following patents: US 6,473,510 B1, D443,250S, D447,119S; Taiwan NI-130119; China ZL 99107639.7.
Other patents pending.

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